

**Long Island Sound Study
Management Committee Meeting
Thursday, July 16, 2009
UConn Stamford**

Welcome/Introductions. Mark Tedesco called the meeting to order at 10:15 am, asking for introductions and any changes to the agenda. There were no suggested changes to agenda. Tedesco indicated that the notes from the April 16 meeting were not available to approve, but that the decisions made at that meeting regarding the 2009 budget were documented in his May 2, 2009 memorandum on the 2009 budget.

Reports. Citizens Advisory Committee. Nancy Seligson reported on the June 11 CAC meeting held at UConn Stamford. The CAC formalized membership on the new accountability and tracking subcommittee. Seligson reported that Dr. Gary Wikfors talked about phytoplankton and its vital role in the biological processes occurring in the Sound. The CAC now better understands the need to focus on biological data obtained from the CTDEP water quality monitoring of the Sound. The CAC discussed the new SoundVision project funded by the LISS, including how it will be coordinated with the CAC. The accountability and tracking subcommittee met and reviewed the SoundVision project and provided feedback to the Connecticut Fund for the Environment, which is responsible for the LISS project grant. Seligson reported that the CAC discussed its process for the cochairs to communicate on issues for the CAC.. The CAC agreed that the cochairs may send letters regarding direct CCMP implementation areas, as these are areas that are recognized as priorities for funding. The CAC must go through its Bylaws processes in taking positions on other issues outside of the CCMP. The cochairs will email drafts of any outside communications to the CAC members prior to sending the letters. The CAC also agreed to reconstitute dredging subcommittee, as it was felt by interest groups there is a need to focus on this issue separately. The subcommittee will keep the CAC informed on this issue; there is no potential CAC position on dredging due to conflicting interests on this issue.

STAC. Hans Dam reported on the Science and Technical Advisory Committee (STAC) meeting held at Stony Brook University on Friday, June 19. James O'Donnell presented the results of his LISS-funded work to review the System-Wide Eutrophication Model. This work was funded in 2005 at the recommendation of the STAC as a CCMP Enhancements Grant project. As a result of the analysis of the model, several improvements were suggested to the model's mathematical coefficients, which will help reconcile model predictions with actual conditions. Mark Tedesco noted that LISS program staff will have to follow up on that presentation to identify specific tasks to support through a new CCMP Enhancement Grant Request for Proposals (RFP) using the approved FY09 funding. Dam also reported that the STAC heard an update on the eelgrass workshop. The LISS provided funds in the 2009 budget to focus on eelgrass work under a CCMP Enhancements Grant RFP. This work also follows up on LISS-funded project in 2004 to investigate parameters to establish restoration criteria for eelgrass. This work was principally conducted by Jamie Vaudrey of UConn in cooperation with CTDEP. CTDEP will take the lead in establishing an eelgrass work group to help guide the development of the LISS CCMP Enhancements Grant RFP. There was also discussion by the STAC on the LIS Fellow guidelines, with concern expressed that holding advisors accountable for incomplete student

projects is a disincentive to supporting applicants for the fellowship. Tedesco reported that the STAC will be asked to review the guidelines in the 2010 LIS Fellow announcement, and can recommend changes.

Mark Tedesco reported for Larry Swanson that all six technical chapters of the LIS environmental data synthesis volume have extended outlines and writing is underway. Sharon Marino reported that the aerial photo survey for eelgrass was flown on July 14-15. USFWS staff are reviewing the photos, and will make photo-interpretations then ground-truth on site over the summer.

NEP Evaluation. Joe Salata reported that the HQ NEP evaluation team conducted its site visit from June 3-5. The NEP program reviews each of the 28 National Estuary Programs every three years to determine if progress is being made implementing the management plans. The team consisted of Nell Orscheln, Tim Jones, Abby Nichols, Susan Holmes from EPA Headquarters and Johanna Hunter from Region 1. The team visited sites selected to convey the primary program areas included in EPA's 2006-2011 Strategic Plan -- nitrogen reduction, hypoxia management, and habitat and fish passage restoration. On the first day, after a morning of staff presentations, the afternoon included visits to the Stamford STP, hosted by Jeanette Brown, and the Mianus River fishway, hosted by Brian Eltz of the Greenwich Conservation Commission. The second day the team took a trip on the IEC vessel *Natale Colosi*, hosted by Pete Sattler and James Bunkwicz, where they sampled water quality parameters. The team then visited Caleb Smith State Park and Sunken Meadow State Park, hosted by Clarence Ware, Gary Lawton and Eric Broecker of NYS Parks, Recreation, and Historic Preservation. The team then traveled to the Nissequogue River area and had a presentation by Rob Freudenberg of the Regional Plan Association on the action plan for the area developed under the stewardship program. The NEP team has until July 31 to issue its draft review letter to the NEP director, and the LISS has until August 14 to prepare its response. The draft letter will be shared with the Implementation Team and a draft response will be prepared by the LISO based on team feedback.

Communications Team. Robert Burg and Larissa Graham presented the work of the communications team, including priorities developed under the 2007-2008 budget process. The team is continuing to follow up on the results of the 2006 public perception survey of LIS watershed residents, particularly how social based marketing can assist in changing the public's attitudes and behaviors. Two social marketing workshops were held in September 2008, which trained over 100 participants. The Communications Team is continuing this work by planning a follow-up survey to the 2006 Public Perception Survey and a follow-up workshop on social marketing. The Communications Team has also initiated a "Sound Stewards" program, partnering with Brookhaven National Laboratory, NYSDEC, NYS Parks, and other organizations. This program encourages environmental stewardship as students conduct research projects and collect data within LISS stewardship sites. On April 18, 2009, LISS also co-sponsored a pharmaceutical take-back event during which over 140 participants returned almost 500 pounds of unwanted medicines. For a copy of the PowerPoint[®] presentation, contact the LISO.

Stewardship Initiative. Louise Harrison reported on the work of the Stewardship Initiative work group, which is also following up on prior years' funding and priorities. The Barn Island

acquisition ceremony was conducted in February 2009, in which the Crowley property was acquired using the \$650,000 LISS contribution under the LIS Stewardship Initiative from 2008 funds. The two proposed New York acquisitions are not certain at this time; NYSDEC has received its \$650,000 under the LISS; however, the grant overmatch is delaying their approvals by the state during this difficult financial time. In 2009 the Management Committee approved \$300,000 for stewardship acquisitions. It appears as if the Crowley 2 property also at Barn Island may be acquired in a larger package of funding with other partners. In the 2008 LISS budget the Committee had approved \$250,000 for an RFP under the LISS Enhancements Grant program to develop a methodology to prioritize sites for the stewardship initiative. There were six proposals received and a review team will make a selection by September 9.

NPS/Watersheds Work Group. The non-point source and watersheds work group is still getting off the ground, though partners are actively engaged in relevant projects. Sarah Deonarine and Mark Parker took over as co-chairs, replacing Johanna Hunter who temporarily held the position. The work group also welcomed new members, a representative from NYSDOS and Jessica Morgan, CTDEP's new Low Impact Development Coordinator, a new position at CTDEP. The group has worked on updating the LIS Futures Fund RFP language to facilitate better project proposals in the future and is developing a "Green Watershed Practices" municipality recognition program. The group intends to hold a "gap discussion" with professionals to bridge the gap between communities and NPS and other watershed projects.

SWEM/TMDL. Mark Tedesco reported that a core writing team is continuing work on the TMDL (Total Maximum Daily Load) revision, which is scheduled for completion by the end of the year. The TMDL will be a topic of the October Management Committee meeting, which will be discussed later on this meeting agenda. Lynne Hamjian suggested that proposals for appropriate load allocations be presented to the Nonpoint Source and Watersheds work group for feedback. This will be put on the agenda for a future work group meeting. Karen Chytalo mentioned that there are still issues for New York on the TMDL revision; this needs to be resolved for the LIS 2009 Agreement.

Research/Assessment. Dr. Julie Rose reviewed the scientific research projects funded under the 2008 LISS Research Grant Program. Five proposals were funded. Dr Mark Altabet, University of Massachusetts, Dartmouth, will investigate factors implicated in triggering summertime hypoxia events in LIS. Dr. Christopher Gobler, Stony Brook University, will provide insights into the development and dynamics of red tides, a serious, emerging human health threat in Long Island Sound. Dr. Darcy Lonsdale, Stony Brook University, will examine the relationship between winter temperature and the abundance and composition of phytoplankton in spring, and will explore potential impacts of changing winter water temperatures on local food webs. Dr. Kamazima Lwiza, Stony Brook University, will identify drivers of hypoxia and elucidate relationships among them. Dr. Robert Wilson, Stony Brook University, will study the effect of weather patterns on LIS hypoxia, specifically to assess the effects of changes in frequency and track position of extra-tropical summertime storms on both inter-annual and long term variations in the severity of hypoxia. Project abstracts are posted on the LISS website: http://longislandsoundstudy.net/research_projects.htm#09. Dr. Rose briefly described her ongoing analysis of phytoplankton data collected by the CTDEP under the LIS water quality monitoring program over the last 7 years. The plankton samples have been collected at a 10-

station subset of the larger monitoring program that spans a linear transect running the length of the Sound. The samples have been analyzed and converted into functional groups and the corresponding set of physical and chemical parameters have been obtained. Preliminary results indicate that despite large observed interannual variability in some of the physical and chemical factors, there appear to be some regular patterns of community change across the time series. Next steps involve linking patterns observed within the phytoplankton community to physical, chemical and meteorological data.

Sentinel Monitoring. Mark Parker and Sarah Deonarine reported on the sentinel monitoring for climate change in LIS program, which was also presented at the STAC meeting. A small team has been formed to follow up on the program; the Management Committee had agreed to the development of a plan for sentinel monitoring, which the team, to be led by CTDEP and NYSDEC staff, will work on in the coming months. Discussions are under way concerning what and where to monitor for the program. They also reported on a new project in CT in which CTDEP and ICLEI will assist the city of Groton, Connecticut in the development of a climate adaptation strategy. It is expected this will be used as a template for other communities. Both of these projects received awards from the 2009 EPA NEP Climate Ready Estuaries Program (CRE).

Habitat Restoration. Heather Young and Harry Yamalis conducted a demonstration of the new habitat restoration database, which is now live on line and can be accessed at <http://www.longislandsoundstudy.net/habitatrestoration/index.htm>. The website will have point and click ability when a site is clicked on, dialog boxes will appear with data and photos of individual sites. This was a project approved by the Management Committee in 2006. For a copy of the presentation contact the LISO. The next habitat restoration work group meeting is in City Island in The Bronx on July 22.

Management Committee members discussed and commented on the work group presentations. Paul Stacey reminded the group of the Governor's climate change task force. Connecticut is applying risk analyses to the state's coastal areas on sea level rise and other change effects. Mark Tedesco and Virginia de Lima are members of work groups. Brian Thompson reported that Jennifer Pagach is the CTDEP staff person on EPA's CRE project on developing an adaption plan for Groton, CT. Mark Tedesco indicated that EPA is also supporting a second LISS CRE project that will provide technical assistance for development of the sentinel monitoring program.

Nancy Seligson applauded the unwanted medicines collection program and its relationship to clean water, further stating that the event helped the public learn proper disposal methods and that flushing unwanted pharmaceuticals down the toilet is not a good method of disposal.

Karen Chytalo commented that there is a need to better synthesize and translate scientific research findings into changes in program direction, citing as an example the recent analysis of SWEM, leading to changes in the model and the way the program can calculate compliance. There was general agreement with this view.

Mark Tedesco commented that for social-based marketing for Long Island Sound, perhaps the program could consider focusing on a broad topic of strategic significance instead of more limited issues, something that communities have to do for green that we can achieve. The LIS Futures Fund could also target social-based marketing outcomes in future announcements.

Draft October Meeting Outline. Mark Tedesco described the process for development of LISS work group/team work plans, indicating that all work groups had been tasked to develop work plans for 2009-10 with existing funding and to identify potential needs for 2010 and beyond. The work plans should also identify potential research, monitoring or modeling needs, communications issues, and any CCMP enhancement requirements or potential for LISFF RFPs. Work plans are due to be submitted by September 4, and the full package or work plans will be circulated to the Management Committee prior to the October meeting. The LIS Needs Assessment will be updated with any projects that have been completed and new needs identified. Staff will summarize priorities identified with any possible funding needs and sources of funding for the priorities.

The Committee members generally discussed the priority and decision-making process for the meeting. Sylvain DeGuise suggested identifying a speaker for the October meeting to discuss integrated assessments (perhaps from NOAA), as a first step toward ecosystem based management (EBM). Karen Chytalo mentioned that Dr. Frist at Stony Brook University is working on a biological model of LIS that can help support integrated assessments. Paul Stacey cautioned that the Clean Water Act (CWA) governs how water quality protection is conducted in the USA, and that other concepts, such as ecosystem based management, must complement that approach, not set up alternate approaches. Jim Latimer agreed that reviews of integrated assessments in the context of EBM should be cross-walked to current CWA assessments.

The discussion then shifted on how to integrate current LIS research results into the LISS strategic planning process. The outcome of the discussion was to rely on an updated LISS Needs Assessment, reviewed by LISS work groups and STAC, with emphasis on synthesis by categories. For the Management Committee meeting three general topics will be the focus of synthetic presentations: water quality, habitat, and living marine resources.

Updates. Kate Brown displayed a composite color map of the Niantic Bay-Thames River area. The map had been electronically “stitched” together using LIDAR (LIght Detection And Ranging) and multi-beam radar data. This process may help identify areas to ground-truth for eelgrass restoration or for energy infrastructure permits.

Mark Parker reported that both New York and Connecticut have recently updated their fish consumption advisories, which was an action item in the 2003 LIS Agreement, and which the LISS provided funding in 2006 and 2007 for fish collection and analysis. Both state departments of health looked at the preliminary data from the LIS study in revising their respective advisories. In general somewhat more fish can be eaten by certain consumers. The LIS project ends in 2010, so final data will not be available until then. Parker also reported that there were 10,000 more blue herring counted at the Mianus River fish passage site, but overall there has been a decline – the Connecticut River count is dropping; eel numbers are increasing, and Atlantic shad numbers at the Holyoke Dam are about 25,000 more than last year.

Lynne Hamjian stated that both EPA acting Regional Administrators are engaged and aware of the issues concerning dredging and the 2009 LIS Agreement. Since the issue of LIS dredging has its own regulatory framework, which functions outside of the LIS agreement, it is fair to say that we are able to remove it from the Agreement, and recognize that it is an ongoing issue and discussion matter under a separate regulatory process. Nancy Seligson said that the CAC fully supports removing these actions from the Agreement and focusing on it outside of the LISS.

Paul Stacey announced that Connecticut is preparing for its triennial review of its water quality standards, and is keeping open the public comment period until the end of July. High on the priority list is dissolved oxygen and anti-degradation standards in LIS. Everyone is invited to submit comments by the end of the month.

Sound Advice. Mark Tedesco recognized Art Glowka, who asked what has improved in the Sound over the last 20 years. Glowka commented that the charter boat *Klondike IX* came in on Sunday evening with six fish and that there were no bunker in the Sound. Glowka asked, 'what is the Sound telling us -- do STPs affect the western Sound that much?' Peter Sattler replied that bunker were plentiful in his experience this summer on the Sound. Glowka reported that he is doing his own water chemistry tests in Stamford, Greenwich, etc. and asking a lot of basic questions that are not being asked, much less answered. Dr. Hans Dam invited Mr. Glowka to make a presentation to the STAC on his issues of concern and the data he has collected, and he agreed to do so. Glowka said that we still have hypoxia, the water is clear, and a lot of questions have to be answered. Dr. Dam, addressing Glowka, said that while we have to be concerned about what he is saying, hypoxia may not be getting better, but it is not getting worse.

Mark Tedesco thanked Glowka for his comments and, there being no further business, adjourned the meeting at 2:50 pm. The next meeting is scheduled for October 14-15 in Port Jefferson, New York; however, several schedule conflicts were identified by Management Committee members. The LISO will poll members for alternate dates and reschedule as appropriate.
